CLAIMS

1. A direct sequence code division multiple access receiver comprising an adaptive filter controlled by an adaptive algorithm for filtering data which has been multiplied by a spreading code and filtered by a channel filter, the adaptive filter having a length appropriate to model the inverse of the channel filter, [and a multiuser detector operating on the output of the adaptive filter].

2. A receiver according to claim 1, wherein the algorithm is trained using the signal of a desired user.

3. A receiver according to claim 1 or 2, wherein the algorithm is trained using a composite signal from more than one user.

4. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the minimum mean squared error type.

5. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the zero forcing (decorrelating) type.

6. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the Volterra type.

7. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the Radial Basis Function type.

8. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the cancellation type.

9. A receiver according to claim 1, 2 or 3, wherein the multiuser detector is of the near optimum decoding type.